APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,518	11/01/2001	William John Goetzinger	ROC920010199US1	8349

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DUGAN & DUGAN, P.C.
55 SOUTH BROADWAY
TARRYTOWN, NY 10591

EXAMINER
NGO, NGUYEN HOANG

ART UNIT	PAPER NUMBER
2663	

DATE MAILED: 02/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
Office Action Summary	10/016,518	GOETZINGER ET AL.	
	Examiner	Art Unit	
	Nguyen Ngo	2663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>25 November 2005</u>.
2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☒ Claim(s) *15-20 and 25* is/are allowed.
6)☒ Claim(s) *1-7,9-14,21,22,24 and 26* is/are rejected.
7)☒ Claim(s) *8 and 23* is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)
1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.
4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____.

DETAILED ACTION

Response to Amendment

1.   This communication is in response to the amendment of November 25, 2005. All

changes made to the Specification, have been entered. Accordingly, Claims 1-26 are

currently pending in the application.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

3.   The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1.   Determining the scope and contents of the prior art.
2.   Ascertaining the differences between the prior art and the claims at issue.
3.   Resolving the level of ordinary skill in the pertinent art.
4.   Considering objective evidence present in the application indicating
        obviousness or nonobviousness.

4.   Claims 1-7, 9-14, 22, 24, and 26 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Naven et al. (US 6,810,043), hereinafter referred to as Naven.

Regarding claim 1, Naven discloses scheduling circuitry, for use to schedule cell

transmissions (a scheduler for a network processor, abstract). Naven further discloses;

that the scheduling circuitry deals effectively with events that is to be scheduled

at widely disparate intervals (very short and very long) without requiring the calendars to

be large and without complicated processing of the calendar entries (one scheduling

queue adapted to define a sequence in which flows (events) are to be serviced,

abstract). Navan further discloses that the scheduling circuitry includes a master

calendar for holding entries corresponding to events that are to occur within a pre-

selected master-calendar range, and a slave calendar for holding entries corresponding

respectively to events that are to occur beyond that scheduling range (including at least

a first sub queue (master calendar) and a second sub queue (slave calendar), the first

sub queue having a first range and the second sub queue having a second range that is

greater than the first range, col5 lines 19-28). It should be obvious to a person skilled in

the art that the master calendar contains a first resolution and the slave calendar

contains a second resolution that is less than the first resolution due to the definition of

resolution that the applicant has provided. On page 8 line 14, the applicant has

disclosed that "resolution" is understood to mean the inverse of the distance increment

that corresponds to each slot in the queue, and further states a direct inverse

relationship between the resolution and the range.

Regarding claim 2, Navan discloses that the master calendar and the slave calendar

are made up of a plurality of storage locations corresponding respectively to a

succession of time slots (col4 lines 44-45). It can also be seen from figure 12 with

correlation to figure 2, that the master calendar have the same number of time slots as

the slave calendar correlating through figure 12 having a second order slave calendar

and a first order calendar having the same number of time slots. It should be obvious to

a person skilled in the art to have the master calendar and the slave calendar have the

same number of time slots equivalent to the second order slave calendar and first order

slave calendar (first sub queue has a number of slots that is equal to a number of slots

of the second sub queue, 36 and 46 of figure 12).

Regarding claim 3, Navan discloses that the master calendar and the slave calendar

are made up of a plurality of storage locations corresponding respectively to a

succession of time slots (col4 lines 44-45). It can also be seen from figure 2 that the

slave calendar and master calendar have a different number of time slots (the first sub

queue has a number of slots that is different than a number of slots of the second

queue, 7 and 2 of figure 2).

Regarding claim 4, Navan discloses a granularity of said timing information included in

each entry in the slave calendar be equal to a granularity with which current time is

measured (Examiner correlates granularity with resolution, col15 lines 33-36). The

applicant has further disclosed that "resolution" is understood to mean the inverse of the

distance increment that corresponds to each slot in the queue correlating to the range

(page8 line14-16). It should thus be obvious to have the second range and the second

resolution to have a direct inverse relationship.

Regarding claim 5, Navan as discussed with claim 4 discloses a granularity of said timing information included in each entry in the slave calendar be equal to a granularity with which current time is measured (Examiner correlates granularity with resolution, col15 lines 33-36). It should be obvious to have the second range and the second resolution have other than a direct inverse relationship as this a parameter is set by the user which is dependent on the number of slots.

Regarding claim 6, Navan discloses a "hierarchy" of slave calendars in which two slave calendars in hierarchy can represent different orders of magnitude of time and that if the scheduling range SR of the master calendar is 1 millisecond, the first order slave calendar will be used to deal with cells that need to be sent in the next 10 millisecond and the second order slave calendar be used to deal with cells that need to be sent in the next 100 milliseconds. Thus when a VC entered in the master calendar is processed, if the calculated next schedule time (NST) is greater than 10 milliseconds, that VS is rescheduled in the second order slave calendar. If, however, its calculated NST is greater than the scheduling range SR (1 millisecond) of the master calendar but less than 10 milliseconds, it is rescheduled in the first order slave calendar (scheduling queue includes a third sub queue (second order slave calendar) having a third range that is greater than the second range, col14 lines 10-26). It should be obvious as stated in claim 1 that the third resolution is less than the second resolution.

Regarding claim 7, Navan discloses scheduling circuitry comprising a master calendar and a slave calendar in which to schedule cell transmissions (a scheduler for a network processor, the scheduler comprising a scheduling queue in which flows are enqueued, Abstract). Navan however fails to disclose the specific limitations of claim 7, more specifically the formula of CP + ((WF x FS)/SF). Navan however discloses using known techniques are used in which the "the next scheduled time" or NST at which the next cell for the specified VC is to be transmitted is calculated (col5 lines 5-8) and further discloses that if the NST is within the scheduling range SR of the master calendar (first sub queue), a new entry for the specified VC is made in an appropriate one of the storage locations of the master calendar, and if on the other hand, the NST is outside the scheduling range SR of the master calendar, the specified VC is instead entered in one of the storage locations of the slave calendar (second sub queue), which storage location is also used to store the NST for the specified VC (the flow appointed for enqueuing is enqueued to the first sub queue if the value of the expression is less than a range of the first sub queue and the flow appointed for enqueuing is enqueued to the second sub queue if the value of the expression is greater than a arrange of the first sub queue, col5 lines 19-29). Navan thus provides the motivation of a need for a formula to effectively calculate the NST.

The applicant has disclosed of a well known formula, more precisely, a known weighted fair queue technique (CP + ((WF x FS)/SF) in which flows are enqueued to the scheduling queue based on the formula that takes into account both a length of a data

frame associated with a flow to be enqueued and a weight which corresponds to a QoS to which the flow is entitled (page 6 and page 7).

It should thus be obvious to incorporate the well known weighted fair queue technique (CP + (WF x FS)/SF) disclosed by the applicant into the scheduling circuitry to schedule cell transmissions including a master calendar and a slave calendar disclosed by Naven in order to effectively calculated the NST.

Regarding claim 9, Navan discloses that the master calendar and the slave calendar are made up of a plurality of storage locations corresponding respectively to a succession of time slots (col4 lines 44-45). It can also be seen from figure 12 with correlation to figure 2, that the master calendar have the same number of time slots as the slave calendar correlating through figure 12 having a second order slave calendar and a first order calendar having the same number of time slots. It should be obvious to a person skilled in the art to have the master calendar and the slave calendar have the same number of time slots equivalent to the second order slave calendar and first order slave calendar (first sub queue has a number of slots that is equal to a number of slots of the second sub queue, 36 and 46 of figure 12).

Regarding claim 10, Navan discloses that the master calendar and the slave calendar are made up of a plurality of storage locations corresponding respectively to a succession of time slots (col4 lines 44-45). It can also be seen from figure 2 that the

slave calendar and master calendar have a different number of time slots (the first sub

queue has a number of slots that is different than a number of slots of the second

queue, 7 and 2 of figure 2).

Regarding claim 11, Navan discloses that the scheduling circuitry includes a master

calendar for holding entries corresponding to events that are to occur within a pre-

selected master-calendar range, and a slave calendar for holding entries corresponding

respectively to events that are to occur beyond that scheduling range (the first sub

queue having a first range and the second sub queue having a second range that is

larger than the first range, col5 lines 19-28). It should be obvious to a person skilled in

the art that the master calendar contains a first resolution and the slave calendar

contains a second resolution that is less than the first resolution due to the definition of

resolution that the applicant has provided. On page 8 line 14, the applicant has

disclosed that "resolution" is understood to mean the inverse of the distance increment

that corresponds to each slot in the queue, and further states a direct inverse

relationship between the resolution and the range, thus correlating to a second sub

queue that has a resolution that is less than a resolution of the first sub queue.

Regarding claim 12, Naven discloses scheduling circuitry, for use to schedule cell

transmissions (a scheduler for a network processor, abstract). Naven further discloses;

that the scheduling circuitry deals effectively with events that is to be scheduled

at widely disparate intervals (very short and very long) without requiring the calendars to

be large and without complicated processing of the calendar entries (one scheduling queue adapted to define a sequence in which flows (events) are to be serviced, abstract). Navan further discloses that the scheduling circuitry includes a master calendar for holding entries corresponding to events that are to occur within a pre-selected master-calendar range, and a slave calendar for holding entries corresponding respectively to events that are to occur beyond that scheduling range (a plurality of sub queues, wherein each successive one of the sub queues has a selected range that is greater than a range of a preceding sub queue, col5 lines 19-28). It should be obvious to a person skilled in the art that the master calendar contains a first resolution and the slave calendar contains a second resolution that is less than the first resolution due to the definition of resolution that the applicant has provided. On page 8 line 14, the applicant has disclosed that "resolution" is understood to mean the inverse of the distance increment that corresponds to each slot in the queue, and further states a direct inverse relationship between the resolution and the range (selected resolution that is less than a resolution of the preceding sub queue).

Regarding claim 13, Navan discloses scheduling circuitry comprising a master calendar and a slave calendar in which to schedule cell transmissions (a scheduler for a network processor, the scheduler comprising a scheduling queue in which flows are enqueued,

Abstract). Navan however fails to disclose the specific limitations of claim 7, more specifically the formula of CP + ((WF x FS)/SF). Navan however discloses using known

techniques are used in which the "the next scheduled time" or NST at which the next

cell for the specified VC is to be transmitted is calculated (col5 lines 5-8) and further

discloses that if the NST is within the scheduling range SR of the master calendar (first

sub queue), a new entry for the specified VC is made in an appropriate one of the

storage locations of the master calendar (enqueuing a flow to a first sub queue if the

expression has a value that is less than a range of the first sub queue), and if on the

other hand, the NST is outside the scheduling range SR of the master calendar, the

specified VC is instead entered in one of the storage locations of the slave calendar

(second sub queue), which storage location is also used to store the NST for the

specified VC (enqueuing the flow to a second sub queue if the expression has a value

that is greater than the range of the first sub queue, col5 lines 19-29). Navan thus

provides the motivation of a need for a formula to effectively calculate the NST.

The applicant has disclosed of a well known formula, more precisely, a known

weighted fair queue technique (CP + ((WF x FS)/SF) in which flows are enqueued to the

scheduling queue based on the formula that takes into account both a length of a data

frame associated with a flow to be enqueued and a weight which corresponds to a QoS

to which the flow is entitled (page 6 and page 7).

It should thus be obvious to incorporate the well known weighted fair queue

technique (CP + (WF x FS)/SF) disclosed by the applicant into the scheduling circuitry

to schedule cell transmissions including a master calendar and a slave calendar

disclosed by Naven in order to effectively calculated the NST.

Regarding claim 14, Navan discloses that the scheduling circuitry includes a master

calendar for holding entries corresponding to events that are to occur within a pre-

selected master-calendar range, and a slave calendar for holding entries corresponding

respectively to events that are to occur beyond that scheduling range (second sub

queue has a range that is larger than the range of the first sub queue, col5 lines 19-28).

It should be obvious to a person skilled in the art that the master calendar contains a

first resolution and the slave calendar contains a second resolution that is less than the

first resolution due to the definition of resolution that the applicant has provided. On

page 8 line 14, the applicant has disclosed that "resolution" is understood to mean the

inverse of the distance increment that corresponds to each slot in the queue, and further

states a direct inverse relationship between the resolution and the range (the second

sub queue has a resolution that is less than a resolution of the first sub queue).

Regarding claim 22, Naven discloses scheduling circuitry and method, for use to

schedule cell transmissions (a scheduler for a network processor, abstract). Naven

further discloses that the scheduling circuitry deals effectively with events that are to be

scheduled at widely disparate intervals (very short and very long) without requiring the

calendars to be large and without complicated processing of the calendar entries

(scheduling queue adapted to define a sequence in which flows are to be serviced,

abstract). Navan further discloses that the scheduling circuitry includes a master

calendar for holding entries corresponding to events that are to occur within a pre-

selected master-calendar range, and a slave calendar for holding entries corresponding

respectively to events that are to occur beyond that scheduling range (including at least

a first sub queue (master calendar) and a second sub queue (slave calendar), the first

sub queue having a first range and the second sub queue having a second range that is

greater than the first range, col5 lines 19-28). It should be obvious to a person skilled in

the art that the master calendar contains a first resolution and the slave calendar

contains a second resolution that is less than the first resolution due to the definition of

resolution that the applicant has provided. On page 8 line 14, the applicant has

disclosed that "resolution" is understood to mean the inverse of the distance increment

that corresponds to each slot in the queue, and further states a direct inverse

relationship between the resolution and the range. Naven further discloses;

using known techniques in which the "the next scheduled time" or NST at which

the next cell for the specified VC is to be transmitted is calculated using the A pointer to

identify the currently-serviced storage location (determining distance from a current

pointer at which a flow is to be attached, col5 lines 1-8).

that if the NST is within the scheduling range SR of the master calendar (first sub

queue), a new entry for the specified VC is made in an appropriate one of the storage

locations of the master calendar (determining if the distance is less than the first range

of the first sub queue, and if so, attaching the flow to the first sub queue),

and if on the other hand, the NST is outside the scheduling range SR of the

master calendar, the specified VC is instead entered in one of the storage locations of

the slave calendar (second sub queue), which storage location is also used to store the

NST for the specified VC (determining if the distance is greater than the first range of

the first sub queue, and if so, attaching the flow to the second sub queue, col5 lines 19-

29).

Regarding claim 24, Naven discloses all the limitations of claim 24 as discussed with

claim 22. It should be noted that claim 24 is simply the computer program containing

the methods of claim 22, and it should be obvious to have a medium readable by a

computer to implement the same steps for the method of claim 22.

Regarding claim 26, Naven discloses all the limitations of claim 26 as discussed with

claim 13. It should be noted that claim 26 is simply the computer program containing

the methods of claim 13, and it should be obvious to have a medium readable by a

computer to implement the same steps for the method of claim 13.

5.   Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Naven

et al. (US 6810043) in view of Mysore et al. (US 6810426), hereinafter referred to as

Naven and Mysore.

Regarding claim 21, Naven discloses scheduling circuitry, for use to schedule cell

transmissions (a scheduler for a network processor, abstract). Naven further discloses;

that the scheduling circuitry includes a master calendar for holding entries

corresponding to events that are to occur within a pre-selected master-calendar range,

and a slave calendar for holding entries corresponding respectively to events that are to

occur beyond that scheduling range (at least a first scheduling queue that includes at

least a first sub queue and a second sub queue, col5 lines 19-28).

Navan however fails to disclose of the specific limitation of a dequeuing from the

scheduling queue by searching the first and second sub queues for respective winning

flows.

Mysore however discloses a process that dequeues packets from multiple

queues (first and second sub queues) in an order based upon an algorithm that

arranges and dequeues those queues having the highest priority (winning flow) based

on content therein (select a flow for dequeuing from the scheduling queue by searching

the first and second sub queues for respective winning flows and selecting one of the

winning flows for dequeuing, col5 lines 8-15) and thus provides the motivation for

dequeuing packets based on the type of data included within the data packet, the type

of data flow, or another attribute of the packet in order to efficiently schedule cell

transmissions from a scheduling queue.

It should thus be obvious to a person skilled in the art to incorporate the process

for dequeuing packets from multiple queues (or sub queues) disclosed by Mysore with

the scheduling circuitry to schedule cell transmissions including a master calendar and

a slave calendar disclosed by Naven in order to efficiently dequeue the calendars (sub

queues) for correct cell transmissions.

Allowable Subject Matter

6.   Claims 8, and 23 are objected to as being dependent upon a rejected base claim,

but would be allowable if rewritten in independent form including all of the limitations of

the base claim and any intervening claims.

7.   Claim 8 is allowable due to the further limitations the least significant digits of the

CP pointer being applied to the first sub queue and the most significant digits of the CP

pointer being applied to the second sub queue.

8.   Claim 23 is allowable due to the further limitations of scaling the distance prior to

attaching the flow to the second sub queue.

9.   Claims 15-20 and 25 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

10.   Claims 15 and 25 is are allowable over the prior art of record since the cited

references taken individually or in combination fails to particularly disclose **determining**

a first and second sub queue distance corresponding to a distance between the

current pointer and a slot in which the first or second winning flow is enqueued

and comparing the first and second queue distances. It is noted that the closest

prior art, Naven et al. (US 6810043) shows the method incorporating scheduling

circuitry which includes a master calendar (first sub queue) for holding entries

corresponding to events that are to occur within a pre-selected master-calendar range,

and a slave calendar (second sub queue) for holding entries corresponding respectively

to events that are to occur beyond that scheduling range. However, Naven et al. fails to

disclose or render obvious to the above underline limitations as claimed.

Response to Arguments

11.   Applicant's arguments filed November 25, 2005 have been fully considered but

they are not persuasive.

12.   The applicant submits that Naven does not teach a first subqueue and a second

subqueue having a first range and a second range respectively. Examiner posits that it

is not unreasonable to interpret the master calendar and slave calendar as a first

subqueue and a second subqueue. Nathan discloses that a master and slave calendar

is made up of a plurality of storage locations capable of storing one or more entries,

each entry specifying a VC that is to be serviced in the time slot to which its storage

location corresponds (col4 lines 44-62). Examiner thus interprets and correlates the

master and slave calendar to be a first subqueue and a second subqueue.

13.   In response to applicant's argument that the references fail to show certain

features of applicant's invention, it is noted that the features upon which applicant relies

(i.e., resolution to be understood to mean the inverse of the distance increment that

corresponds to each slot in the queue) are not recited in the rejected claim(s). Although

the claims are interpreted in light of the specification, limitations from the specification

are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057

(Fed. Cir. 1993). Nathan, as discussed above, discloses a Master calendar with a

scheduling range, and Slave calendar for holding entries corresponding respectively to

events that are to occur beyond the scheduling range of the Master calendar. It is thus

seen that the Master calendar has a first range and the Slave calendar has a second

range that is greater than the first range. Examiner thus interprets the term "resolution"

to refer to the inverse relationship of the range of the Master and Slave calendars. The

Slave range be greater than the Master range, corresponding to the Slave resolution

being less then the Master resolution. It is further seen from Hughes et al. (US

5835494), Multi-Level Rate Scheduler, of calendars with certain granularity. More

specifically, Hughes discloses virtual connections with faster transfer rates are

scheduled using higher granularity calendars, while virtual connections with slower

transfer rates are scheduled using lower granularity calendars. It is thus apparent that

the Master and Slave calendar have granularity corresponding to resolution as

disclosed by Naven (col15 lines 32-35) further seen from Hughes.

14.   The applicant submits that the circuitry of Naven is explained in the context of an

ATM network, as agreed upon by the Examiner, and applicant further submits that the

variable FS for frame size would not be required for a formula to effectively calculate the

NST as disclosed by Naven. It should be noted that nowhere in claims 7, 13, and 26

does it state the limitation of FS (frame size) be variable as submitted by the applicant.

Thus Examiner correlates the frame size (FS) of claim 7, 13, and 26 to correlate to a

fixed cell size that may be used in the well known weighted fair queue technique

formula as admitted upon by applicant and as suggested by Naven to efficiently

calculate the NST. Naven discloses using known techniques are used in which the "the

next scheduled time" or NST at which the next cell for the specified VC is to be

transmitted is calculated (col5 lines 5-8).

Conclusion

15.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

        a) Hughes et al. (US 5835494), Multi-Level Rate Scheduler.

16.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

        A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

17.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Nguyen Ngo whose telephone number is (571)272-

8398. The examiner can normally be reached on Monday-Friday 7am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ricky Ngo can be reached on (571)272-3139. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

N.N.
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Nguyen Ngo
United States Patent & Trademark Office
Patent Examiner AU 2663

RICKY Q. NGO
SUPERVISORY PATENT EXAMINER

(571) 272-8398